

des phénomènes d'interférence, des aspects écologiques des maladies qu'ils déterminent, l'auteur part du général, expose ses vues personnelles et les illustre avec des exemples tirés de cas particuliers, souvent de ses propres travaux.

On trouvera peut-être que sur certains points l'auteur a trop systématiquement adopté un point de vue personnel. Pour notre part, nous l'en féliciterons, car il en résulte une oeuvre solidement charpentée, et l'allure combative donnée à certains aspects des questions traitées n'est pas pour nous déplaire.

En 21 chapitres l'auteur passe en revue les aspects fondamentaux et les problèmes les plus actuels de la virologie. Tous les chapitres se lisent avec le même intérêt, même si l'on ne partage pas nécessairement les opinions de l'auteur sur différents points, comme par exemple sur le rôle retiré à l'immunité tissulaire dans l'immunité. Il ne faut pas davantage y chercher une documentation extensive ni la bibliographie complète des sujets traités. L'ouvrage n'en est pas moins d'une importance capitale, dont la lecture doit être hautement profitable, même et peut être surtout à ceux pour qui les sujets traités sont familiers. Rédigé par un savant dont l'apport personnel aux recherches sur les virus a été d'une importance primordiale, il nous aide à faire le point de nos connaissances et nous renseigne autant sur le mécanisme de la pensée de l'auteur que sur les faits récemment acquis.

Si certaines des vues qu'il expose prêteront à la discussion, si certaines des théories seront critiquées, discussions et critiques seront de celles qui, constructives, stimuleront l'ardeur des chercheurs et contribueront à résoudre les problèmes. C'est peut être là le meilleur éloge que l'on puisse faire d'un livre que sa présentation agréable et les excellents schémas qui l'illustrent contribueront à rendre rapidement populaire.

P. LÉPINE (Paris)

*Radioisotopes in Biology and Agriculture*, by C. L. COMAR (Oak Ridge Institute of Nuclear Studies). xvi + 481 pages, McGraw Hill, London, 1955, \$ 3.7.6d. (\$ 9.00).

This is a general book on the biological applications of isotopes, and contains the following chapters: Principles of Tracer Methodology; Basic Difficulties in Tracer Methodology; Health Physics and Radiation Protection; Facilities and Handling of Radioisotopes with Animals and Plants; General Procedures for Radioassay; Properties and Procedures for Individual Isotopes; Autoradiography; Paper Chromatography; Ion Exchange; Radioactive Analysis. There is also a Glossary of Selected Terms in Nuclear Science, and Tables showing the Availability of U.S. Atomic Energy Commission reports and Radioisotope Preparations.

Dr. COMAR has included much useful information especially in Chapters 1, 7, 8, 9 and 10. Worthy of special mention are the specific activity-time curves in Chapter 1 and the techniques for experimenting with large animals in Chapter 4. The chapter on Autoradiography (7) will be welcomed by all who wish to apply this useful technique. It contains full experimental details together with tables of suitable film and microscopic stains. Also valuable are the tables of developing solvents for paper chromatography in Chapter 8, and an example of ion exchange analysis as applied to yeast nucleic acids in Chapter 9.

The value of the book to Europeans is diminished by its insistence on American standards, regulations and sources of materials. Furthermore, it is expensive and could well have been shorter and consequently cheaper. The useful information which it undoubtedly contains has to be dug out of a mass of unnecessary material, and the treatment in many places is far too elementary. When the author says his book is intended for the "student and the investigator" he presumably does not mean the schoolboy, in which case he need not have wasted space in recommending against putting radioactive substances in milk or soft drink bottles (p. 108). Neither need he have taken up 17 pages on a glossary which consists almost entirely of common scientific words.

The author's written style is verbose, thus contributing to the unnecessary length of the book and he is also given to the use of such terms as *sacrifice* when he means *kill*, *depilate* when he means *shave*, and *appears to be the preparation of choice* when he means *best*. This all shows an insensitivity to the capacity of the English language for conveying ideas, and sets a bad example to the citizens of non-English speaking countries who nevertheless have to read and write English.

The book is well made, the diagrams are good, the photographs well reproduced, the type clear and the paper excellent. Author and subject indexes are comprehensive.

R. F. GLASCOCK (Shinfield)

*Perspectives and Horizons in Microbiology*, edited by SELMAN A. WAKSMAN. Rutgers University Press, New Brunswick, N.J., 1955, 220 pp., \$ 3.50.

On 7th June 1954 a distinguished company of microbiologists gathered at Rutgers University New Jersey for the dedication of a new Institute of Microbiology. The foundation of the Institute owes almost everything to the distinguished work of its first director (Dr. SELMAN A. WAKSMAN) on streptomycin. In Dr. WAKSMAN's own words "This Institute will devote its efforts to the study of the smallest forms of life, the microbes, wherever they are found and no matter what their activities may be". This broad interest is reflected in the Symposium which accompanied the dedication and of which this book forms the printed record. Thirteen eminent and active workers drawn from various fields of microbiology discoursed under three main headings: the microbe as a living system, metabolism of microorganisms, and microorganisms and higher forms of life.

As was fitting for the occasion many speakers were concerned with the challenge of unsolved problems rather than with reciting past or present achievements; the latter were used mainly to emphasize hopeful methods of approach or what VAN NIEL terms "break through" discoveries. In a rapidly growing science it is a good thing to stop occasionally and try to re-focus the real objectives—it is only too easy to be dazzled, if not misled, by impressive detailed advances in limited fields. In this perception of true perspectives the Symposium succeeds admirably. The inclusions of "horizons" in the title is not so fortunate, nor does it reflect the contributions. Horizons continually retreat before one and their pursuit (like that of the rainbow's end) may stimulate rosy speculation of what lies forever beyond our view rather than a proper attention to shaping a course towards our ultimate port.

For reasons springing from their biological properties, microbes have become popular tools for research in other fields—biochemistry, genetics and so on. Another thread running through many contributions is a plea, sometimes rightly passionate, for more consideration of the life of the organism itself.

If any microbiologist should be short of a problem he will find a wide selection set out in this book; he need not be discouraged by the thought that the eminent writers have not solved them already—there are too many. But if he has read this book he will at least start out in the right frame of mind.

D. D. WOODS (Oxford)

*Aspects du métabolisme des stéroïdes hormonaux*, par GREGORY PINCUS, *Actualités biochimiques*, Editions Desoer, Liège, et Masson et Cie., Paris 1955, 108 pp. avec 23 figures et 37 tableaux, 1000 francs.

Ce livre, préfacé par R. COURRIER et J. ROCHE, représente le texte de six conférences prononcées par G. PINCUS au Collège de France; ces conférences constituent les six chapitres du présent ouvrage: I. Les corticostéroïdes surréniaux et leur biosynthèse *in vitro*, II. La genèse des corticostéroïdes (rôle de l'ACTH), III. La corticostéroïdogénèse chez l'homme, IV. La biogenèse des hormones sexuelles, V. Aspects fonctionnels du métabolisme des stéroïdes: les hormones sexuelles, VI. Vieillesse et sénescence. Appendice: Sur la parthénogénèse de l'oeuf de Lapin. Bibliographie de 157 références.

Mise au point très intéressante contenant en grande partie les résultats expérimentaux du laboratoire de l'auteur même; cet ouvrage sera lu avec profit par tous ceux qui s'intéressent aux problèmes si actuels posés par le métabolisme des stéroïdes hormonaux.

E. LEDERER (Paris)